

EXHIBIT B

Patent Claims Analysis

of

US9426452: "Faster state transitioning for continuous adjustable 3Deeps filter spectacles using multi-layered variable tint materials"

against

Volkswagen Surround View System

US9426452B2

United States

Inventor Kenneth Martin Jacobs, Ronald Steven Karpf

Current Assignee Vdpp LLC

Worldwide applications

2009 [US](#) 2010 [US](#) 2013 [US](#) 2014 [US](#) [US](#) 2015 [US](#) 2016 [US](#) 2017 [US](#)

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| Claims priority from a provisional application | | 01/23/2001 | Expired | - |
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Total patentTerm Adjustments

0

CLAIMS

2. An apparatus comprising:

a storage adapted to:

store one or more image frames; and

a processor adapted to:

obtain a first image from a first video stream;

obtain a second image from a second video stream, wherein the first image is different from the second image;

stitch together the first image and the second image to generate a stitched image frame;

generate a first modified image frame by removing a first portion of the stitched image frame;

generate a second modified image frame by removing a second portion of the stitched image frame;

generate a third modified image frame by removing a third portion of the stitched image frame;

wherein the first modified image frame, the second modified image frame, and the third modified image frame are different from each other;

identify a bridge frame;


blend the first modified image frame with the bridge frame to generate a first blended frame;

blend the second modified image frame with the bridge frame to generate a second blended frame;

blend the third modified image frame with the bridge frame to generate a third blended frame;

overlay the first blended frame, the second blended frame, and the third blended frame to generate a combined frame;

display the combined frame.

| Row | Claim Element | Contention |
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| 2.0 | 2. An apparatus comprising: | <p><i>Volkswagen Surround View System is an apparatus.</i></p> <p><i>This is a picture of the Volkswagen Surround View System.</i></p>  <p><https://www.volkswagen-newsroom.com/en/area-view-3665> @ 2023</p> <p><i>Potentially infringing Volkswagen products in the following brands:</i></p> <ul style="list-style-type: none"> • Volkswagen Atlas • Volkswagen Tiguan • Volkswagen Touareg • Volkswagen Golf <p><https://chat.openai.com/></p> |
| 2.1 | a storage adapted to: store one or more image frames; and | <p><i>Volkswagen Surround View System has a storage adapted to store one or more image frames.</i></p> |
| 2.2 | a processor adapted to: obtain a first image from a first video stream; | <p><i>Volkswagen Surround View System has a processor.</i></p> <p><i>Volkswagen Surround View System has Multiple Camera Input.</i></p> <div data-bbox="505 1493 1528 1745"> <p>VW Area View cameras</p> <p>If your Volkswagen is equipped with Area View, it has four onboard cameras. The front camera is located in the radiator grille and gives a 180-degree view to the front. The side cameras are located under the vehicle's side mirrors and give a 90-degree perspective toward your blind spots. The rear camera is located in the handle of the tailgate and gives a 180-degree view of what's behind. The views from the four cameras are digitally stitched together in real time by the electronic control unit and displayed on your vehicle's touchscreen.</p> </div> <p><https://www.hallvw.com/blog/how-does-vw-overhead-view-camera-work/> 2016-02-15</p> <p><i>Volkswagen Surround View System can obtain a first image from a first video stream.</i></p> |

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| 2.3 | obtain a second image from a second video stream, wherein the first image is different from the second image; | <p><i>Volkswagen Surround View System has Multiple Camera Input.</i></p> <div data-bbox="505 222 1523 474"> <p>VW Area View cameras</p> <p>If your Volkswagen is equipped with Area View, it has four onboard cameras. The front camera is located in the radiator grille and gives a 180-degree view to the front. The side cameras are located under the vehicle's side mirrors and give a 90-degree perspective toward your blind spots. The rear camera is located in the handle of the tailgate and gives a 180-degree view of what's behind. The views from the four cameras are digitally stitched together in real time by the electronic control unit and displayed on your vehicle's touchscreen.</p> </div> <p><https://www.hallvw.com/blog/how-does-vw-overhead-view-camera-work/> 2016-02-15</p> <p><i>Volkswagen Surround View System can obtain a second image from a second video stream.</i></p> <p><i>Since the two video streams are different, the first image is different from the second image.</i></p> |
| 2.4 | stitch together the first image and the second image to generate a stitched image frame; | <p><i>Volkswagen Surround View System stitches the different input frames together. The Surround View generates a single image (stitched image frame) by stitching the image frames together.</i></p> <div data-bbox="505 894 1523 1146"> <p>VW Area View cameras</p> <p>If your Volkswagen is equipped with Area View, it has four onboard cameras. The front camera is located in the radiator grille and gives a 180-degree view to the front. The side cameras are located under the vehicle's side mirrors and give a 90-degree perspective toward your blind spots. The rear camera is located in the handle of the tailgate and gives a 180-degree view of what's behind. The views from the four cameras are digitally stitched together in real time by the electronic control unit and displayed on your vehicle's touchscreen.</p> </div> <p><https://www.hallvw.com/blog/how-does-vw-overhead-view-camera-work/> 2016-02-15</p> |
| 2.5 | generate a first modified image frame by removing a first portion of the stitched image frame; | <p><i>Volkswagen Surround View System has a display screen (LCD or an LED, or OLED).</i></p> <p><i>Since it is an LCD (or an LED, or OLED) screen, Volkswagen Surround View System removes the Green and Blue color from the stitched image frame (leaving just the Red) to generate a first modified image frame.</i></p> |
| 2.6 | generate a second modified image frame by removing a second portion of the stitched image frame; | <p><i>Volkswagen Surround View System has a display screen (LCD or an LED, or OLED).</i></p> <p><i>Since it is an LCD (or an LED, or OLED) screen, Volkswagen Surround View System removes the Red and Blue color from the stitched image frame (leaving just the Green) to generate a second modified image frame.</i></p> |
| 2.7 | generate a third modified image frame by removing a third portion of the stitched image frame; | <p><i>Volkswagen Surround View System has a display screen (LCD or an LED, or OLED).</i></p> <p><i>Since it is an LCD (or an LED, or OLED) screen, Volkswagen Surround View System removes the Red and Green color from the stitched image frame (leaving just the Blue) to generate a third modified image frame.</i></p> |
| 2.8 | wherein the first modified image frame, the second modified image frame, and | <p><i>The first modified image frame, the second modified image frame, and the third modified image frame are different from each other</i></p> <p><i>SINCE</i></p> |

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| | the third modified image frame are different from each other; | <i>they are different colors.</i> |
| 2.9 | identify a bridge frame; | <p><i>Volkswagen Surround View System generates parking guidelines to assist the driver.</i></p> <p><i>The Parking Guidelines (Parking Help Frame) are a bridge frame.</i></p> <div data-bbox="505 426 1523 669" data-label="Image"> </div> <p><https://www.hallvw.com/blog/how-does-vw-overhead-view-camera-work/> 2016-02-15</p> |
| 2.10 | blend the first modified image frame with the bridge frame to generate a first blended frame; | <p><i>[Note: The Parking Guidelines (Parking Help Lines) are created separately by Volkswagen Surround View system.]</i></p> <p><i>Since it is an LCD (or an LED, or OLED) screen, Volkswagen Surround View System blends the first modified image frame with the bridge frame (parking guidelines) to generate a first blended frame.</i></p> |
| 2.11 | blend the second modified image frame with the bridge frame to generate a second blended frame; | <p><i>[Note: The Parking Guidelines (Parking Help Lines) are created separately by Volkswagen Surround View system.]</i></p> <p><i>Since it is an LCD (or an LED, or OLED) screen, Volkswagen Surround View System blends the second modified image frame with the bridge frame (parking guidelines) to generate a second blended frame.</i></p> |
| 2.12 | blend the third modified image frame with the bridge frame to generate a third blended frame; | <p><i>[Note: The Parking Guidelines (Parking Help Lines) are created separately by Volkswagen Surround View system.]</i></p> <p><i>Since it is an LCD (or an LED, or OLED) screen, Volkswagen Surround View System blends the third modified image frame with the bridge frame (parking guidelines) to generate a third blended frame.</i></p> |
| 2.13 | overlay the first blended frame, the second blended frame, and the third blended frame to generate a combined frame; | <p><i>Volkswagen Surround View System overlays the first blended frame, the second blended frame, and the third blended frame to generate a combined frame.</i></p> <p><i>The three (3) Red-Green-Blue subpixels blended frames are overlaid to produce the picture (the combined frame) in color.</i></p> |
| 2.14 | display the combined frame. | <p><i>Volkswagen Surround View System displays the combined frame.</i></p> <p><i>This is a picture of Volkswagen Surround View System with Parking Guidelines.</i></p> |



<<https://www.volkswagen-newsroom.com/en/area-view-3665>> @ 2023